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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,446	04/02/2004	Osamu Miyazawa	9319A-000754	1618

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EXAMINER	
ADDISON, KAREN B	

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,446	MIYAZAWA, OSAMU	
	Examiner	Art Unit	
	Karen B. Addison	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10-22,24 and 25* is/are allowed.

6)☒ Claim(s) *1-4,6,7,9 and 23* is/are rejected.

7)☒ Claim(s) *5 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4,6-7,9 and 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zumeris(421) in view of Vishnevsky(103) and combined with Miyazawa(WO 38309-cited by applicant).

Zumeris (421), Figures 8 and 9 teaches an operating apparatus comprising and element #114, a frame #115,the contacted element; which is stationary with respect to the frame#102,the vibrating element #109, 111 the vibrating element being fixedly mounted on the element in a state where the contact portion abuts the contacted element, the vibrating element receives rotation force from the contacted element when the vibrating element vibrates so that the element is rotated together with the vibrating element by means of the reaction force. This structure is described as a bearing in which and inner race moves relative to an outer race thus the designation of driven element and drive element is not distinct. That is, it is not explicitly clear weather the inner race or outer race could be considered the rotor and which could be considered to be the state. Vishnesky, compare for example figure 1 in which the piezoelectric vibrating element is part of the rotor with for example figure 17 which teaches the piezoelectric vibrating as part the state. Thus, regardless of Zumeris ambiguity it would

have been obvious to one of ordinary skill in the art from thee explicitly teaching of Vishnevsky that #102 could be fixed (a fixed state) while #104 could rotate. Zumeris, Figures 2 and 18 does not explicitly use a laminated vibrating element comprising a reinforcing plate with a contact portion sandwiched between two piezoelectric elements. However, this specific construction is well-know improvement to the basic Zumeris vibrator not specifically figures 6,8,9,21 and 29 of Miyazawa. The laminated construction allows a higher power input and larger mechanically output as well a better wear protection and a mechanically stronger vibrator. Thus, for at least these reason, it would have been obvious to one having ordinary skill in the art to utilize the vibrator construction of Miyazawa in the device of Zumeris.

Allowable Subject Matter

3. Claims 10-22, 24-25 allowed.

Prior art fails to show a vibrating element transmits power to the first frame via the contacted element to rotate the first frame. Prior art also fails to show, the vibrating element transmits power to the driven element via the first contacted element to rotate the driven element with respect to the first frame, and the second vibrating element transmits power to the first frame via the second contacted element to rotate the first frame with respect to the second frame.

4. Claims 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior also fails to show, the driven element having a side surface and the frame having an inner wall surface which is opposite to the side surface of the driven element through a gap there between, and the contacted element and the vibrating element are arrange within the gap. Prior art also fails to show, a decelerating mechanism between the contacted element and the driven element.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B. Addison whose telephone number is 571-272-2017. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRAN NGUYEN
PRIMARY EXAMINER

KBA
3/1/06